

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015870**Date Inspected:** 19-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

**Bay 10**

This QA Inspector randomly observed the following work in progress in Bay 10:

FCAW welding of weld joint SP3115-001-50 located on PCMK OBG side plate to stiffener. Welder was identified as 053870. QC was identified as ZPMC CWI Zhao Chen Sun (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Sun Tian Liang (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-P-2132. Also at this location and appearing to be monitoring the welding operation was ABF Representative Wang Zhang Hua.

FCAW tack welding of weld joints EP3025-001-001~009, 110 located on PCMK OBG edge plate to stiffeners. Welder was identified as 052075. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1. Welding variables recorded by QCA1 appeared to comply with WPS-B-P-2132. Also at this location and appearing to be monitoring the welding operation was ABF Representative Wang Zhang Hua.

**Bay 11**

This QA Inspector randomly observed no apparent welding related work being performed in Bay 11.

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### OBG Trial Assembly Area

This QA Inspector randomly observed the following work in progress in the OBG Trial Assembly Area:

SMAW welding of weld joint SEG058A-014 located outside PCMK 9EE holdback weld, side plate to bottom plate, at the 9DE/9EE transverse joint, south (bikepath) side. QC was identified as ZPMC CWI An Qing Xiang (QC2). Welder was identified as 037996. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Li Yang (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

SMAW welding of weld joint OBE9C-008 located outside PCMK 9DE/9EE, bottom plate to bottom plate, transverse joint. Welder was identified as 067656. QC was identified as ZPMC CWI An Qing Xiang (QC2). Welding variables recorded by QC2 appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

FCAW welding of weld joint CA066-002 located inside PCMK 9DE and weld joint CA070-002 located inside PCMK 9EE, edge plate to deck plate, holdback welds. Welder was identified as 220067. QC was identified as QC2. Welding variables recorded by QC2 appeared to comply with WPS-B-T-2234-TC-U4b-F. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cao Hai Zhou.

FCAW welding of weld joints SP627-001-049~060 located inside PCMK 9DE and SP628-001-001~012 located inside PCMK 9EE, side plate to T-stiffeners, holdback welds. Welder was identified as 220069. QC was identified as QC2. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2132. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cao Hai Zhou.

FCAW welding of weld joints SP587-001-001~012 located inside PCMK 9DE and SP588-001-001~012 located inside PCMK 9EE, side plate to T-stiffeners, holdback welds. Welder was identified as 220063. QC was identified as QC2. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-2132. Also at this location and appearing to be monitoring the welding operation was ABF Representative Cao Hai Zhou.

### Heavy Dock

This QA Inspector randomly observed the following work being performed on the Heavy Dock:

This QA Inspector observed no apparent welding related work was being performed on the Heavy Dock. All 4 tower lifts 2 were erect with all 4 tower lifts 3 attached above, respectively. No ABF representative presence was observed anywhere on the Heavy Dock. The lifts 2/3 worker access tower elevator was lit, but appeared to be off and unmanned. Crossbeams 7, 8, 9, and 10 were still on the ship moored to the end of the Heavy Dock, as before. OBG segment 7E was positioned on deck, forward of the crossbeam sections with segment 7W positioned on top of 7E, also as before. OBG segment 8E had been loaded onto the ship and was positioned aft of the crossbeam sections. ZPMC workers were performing various tasks such as, but not limited to, scaffold erection at the aft end of OBG segment 8E.

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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No significant conversations.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet, George	Quality Assurance Inspector
<b>Reviewed By:</b>	Dawson, Paul	QA Reviewer

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